



Canadian Aeronautics and Space Journal

**INDEX TO VOLUME 28
1982**

**Published by the
CANADIAN AERONAUTICS AND SPACE INSTITUTE
Saxe Building
60 — 75 Sparks Street
Ottawa, Ontario K1P 5A5**

CANADIAN AERONAUTICS AND SPACE JOURNAL

Index to Volume 28 1982

Number 1 - March.....	pp 1 - 92
Number 2 - June.....	pp 93 - 208
Number 3 - September.....	pp 209 - 304
Number 4 - December.....	pp 305 - 400

A

Advanced Design Structural Considerations When Introducing New Materials and Construction Methods: J.E. Fischler.....	346
AGARD Announcements.....	68, 184, 270, 386
Aircraft Development, The Application of a Sub-Scale Flight Demonstrator as a Cost- Effective Approach to: G. Rosenthal.....	359
Air Operations in Northeastern North America, The Best Near-Term Solution to: Loran-C RNAV: W.L. Polhemus.....	234
Air Traffic Control Effort, The Canadian — Energy Conservation in Air Transporta- tion: R.E. Chafe.....	339
Alex, T.K., Y.K. Jain, M.P. Philip, B. Kalakrishnan, J.A. Kamalakar and K. Kanakaraju: Attitude Sensing of AP- PLE.....	108
Annual General Meeting Report.....	285
Annual Report of the Council, 1981/82.....	198
APPLE, Attitude Sensing of: Y.K. Jain, M.P. Philip, B. Kalakrishnan, J.A. Kamalakar, K. Kanakaraju and T.K. Alex.....	108
Application of a Sub-Scale Flight Demon- strator as a Cost-Effective Approach to Aircraft Development, The: G. Rosenthal.....	359
Attitude Sensing of APPLE: Y.K. Jain, M.P. Philip, B. Kalakrishnan, J.A. Kamalakar, K. Kanakaraju and T.K. Alex.....	108

B

Beaufort Sea Loran-C Tests: R.M. Eaton, M. McAloney, A. Mortimer, E. Shening and B. Waldock.....	9
Book Reviews:	
Dynamics of Flight — Stability and Con- trol (Second Edition): Bernard Etkin....	70
The Canadair Sabre: CANAV Books.....	70
Explosives: Rudolph Meyer.....	71
Aerodynamics — The Science of Air in Motion: J.E. Allen.....	186
A Meeting with the Universe: National Aeronautics and Space Administration..	186

Molecular Nature of Aerodynamics: G.N. Patterson.....	272
The Canadair North Star: CANAV Books.....	272
Introduction to Thermodynamics — Classical and Statistical: R.E. Sonntag and G.J. Van Wylen.....	387

C

Canadair Challenger Advanced Composite Material Program, The: R.J. Hébert.....	159
Canadian Aerospace Abstracts.....	65, 181, 267, 383
Canadian Air Cushion Technology Society News.....	81, 197, 282, 395
Canadian Navigation Society, New Direc- tions for the: M. Walker.....	3
Canadian Navigation Society News.....	83
Canadian Navy, Navigation in the: R.W. Munday.....	19
Carbon Formation in Gas Turbine Com- bustors, Some Fuel Effects on: J. Odgers and D. Kretschmer.....	327
CASI Log.....	73, 189, 275, 388
CF-5 Aircraft, Compressor Stall Inducing Installation Effects of an Engine Control Parameter for the: W.L. MacMillan, D.M. Rudnitski and W. Grabe.....	28
Chafe, R.E.: Energy Conservation in Air Transportation — The Canadian Air Traf- fic Control Effort.....	339
Commercial Transports, New Technology for the Next Generation of — Real or Im- aginary?: I.S. Macdonald.....	222
Composite Material Program, The Canadair Challenger Advanced: R.J. Hébert.....	159
Composite Materials in Aircraft Propellers, The Use of: D.G. Hall and J.H. Young....	97
Composite Patches for Repair of Aircraft Structural Parts, The Use of: R.F. Scott and P. Huculak.....	122
Composites; Development of a Structural, Bird Impact Resistant, De-Iced Wing Leading Edge for the de Havilland DASH 8 Aircraft Using Fibre-Reinforced: L.K. John and G.A. Terwissen.....	252

Composites for Maximum Toughness, Designing: M.R. Piggott	148
Composites, The Prediction of Material Damping of Laminated: W.D. Morison ..	372
Composite Technology on Commercial Transport Aircraft, The Impact of: D.G. Smillie	135
Compressor Stall Inducing Installation Effects of an Engine Control Parameter for the CF-5 Aircraft: W.L. MacMillan, D.M. Rudnitski and W. Grabe	28

D

de Havilland DASH 8 Aircraft Using Fibre-Reinforced Composites; Development of a Structural, Bird Impact Resistant, De-Iced Wing Leading Edge for the: L.K. John and G.A. Terwissen	252
Designing Composites for Maximum Toughness: M.R. Piggott	148
Development of a Structural, Bird Impact Resistant, De-Iced Wing Leading Edge for the de Havilland DASH 8 Aircraft Using Fibre-Reinforced Composites: L.K. John and G.A. Terwissen	252

E

Eaton, R.M., M. McAloney, A. Mortimer, E. Shening and B. Waldock: Beaufort Sea Loran-C Tests	9
Elfstrom, G.M.: Extraction of Wave Drag from Airfoil Wake Measurements	42
Energy Conservation in Air Transportation — The Canadian Air Traffic Control Effort: R.E. Chafe	339
Engine Control Parameter for the CF-5 Aircraft, Compressor Stall Inducing Installation Effects of an: W.L. MacMillan, D.M. Rudnitski and W. Grabe	28
Evaluation of IFR Handling Qualities of Helicopters Using the NAE Airborne Simulator, An: M. Sinclair, S. Kereliuk and S. Grossmith	264
Extraction of Wave Drag from Airfoil Wake Measurements: G.M. Elfstrom	42

F

Fischler, J.E.: Advanced Design Structural Considerations When Introducing New Materials and Construction Methods	346
Flight Testing Simulation and Real-Time Analysis, Helicopter: K. Lunn	307

G

Gas Turbine Combustors, Some Fuel Effects on Carbon Formation in: J. Odgers and D. Kretschmer	327
Grabe, W., W.L. MacMillan and D.M. Rudnitski: Compressor Stall Inducing Installation Effects of an Engine Control Parameter for the CF-5 Aircraft	28
Gray, Ian A.: The President's Message	95
Grossmith, S., M. Sinclair and S. Kereliuk: An Evaluation of IFR Handling Qualities of Helicopters Using the NAE Airborne Simulator	264

H

Hall, D.G. and J.H. Young: The Use of Composite Materials in Aircraft Propellers	97
Hébert, R.J.: The Canadair Challenger Advanced Composite Material Program	159
Helicopter Flight Testing Simulation and Real-Time Analysis: K. Lunn	307
Huculak, P. and R.F. Scott: The Use of Composite Patches for Repair of Aircraft Structural Parts	122

I

IFR Handling Qualities of Helicopters Using the NAE Airborne Simulator, An Evaluation of: M. Sinclair, S. Kereliuk and S. Grossmith	264
Impact of Composite Technology on Commercial Transport Aircraft, The: D.G. Smillie	135

J

Jain, Y.K., M.P. Philip, B. Kalakrishnan, J.A. Kamalakar, K. Kanakaraju and T.K. Alex: Attitude Sensing of APPLE	108
John, L.K. and G.A. Terwissen: Development of a Structural, Bird Impact Resistant, De-Iced Wing Leading Edge for the de Havilland DASH 8 Aircraft Using Fibre-Reinforced Composites	252

K

Kalakrishnan, B., Y.K. Jain, M.P. Phillip, J.A. Kamalakar, K. Kanakaraju and T.K. Alex: Attitude Sensing of APPLE	108
Kamalakar, J.A., Y.K. Jain, M.P. Philip, B. Kalakrishnan, K. Kanakaraju and T.K. Alex: Attitude Sensing of APPLE	108
Kanakaraju, K., Y.K. Jain, M.P. Philip, B. Kalakrishnan, J.A. Kamalakar and T.K. Alex: Attitude Sensing of APPLE	108
Kereliuk, S., M. Sinclair and S. Grossmith: An Evaluation of IFR Handling Qualities of Helicopters Using the NAE Airborne Simulator	264
Kretschmer, D. and J. Odgers: Some Fuel Effects on Carbon Formation in Gas Turbine Combustors	327

L

Liang, D.F. and J.C. McMillan: Simulation Analysis for the Design and Evaluation of an Integrated Marine Navigation System ..	166
Loran-C RNAV. The Best Near-Term Solution to Air Operations in Northeastern North America: W.L. Polhemus	234
Loran-C Tests, Beaufort Sea: R.M. Eaton, M. McAloney, A. Mortimer, E. Shening and B. Waldock	9
Lunn, K.: Helicopter Flight Testing Simulation and Real-Time Analysis	307

M

Macdonald, I.S.: New Technology for the Next Generation of Commercial Transports — Real or Imaginary?	222
---	-----

MacMillan, W.L., D.M. Rudnitski and W. Grabe: Compressor Stall Inducing Installation Effects of an Engine Control Parameter for the CF-5 Aircraft	28
Marine Navigation System, Simulation Analysis for the Design and Evaluation of an Integrated: D.F. Liang and J.C. McMillan	166
McAloney, M., R.M. Eaton, A. Mortimer, E. Shening and B. Waldock: Beaufort Sea Loran-C Tests	9
McMillan, J.C. and D.F. Liang: Simulation Analysis for the Design and Evaluation of an Integrated Marine Navigation System ..	166
Morison, W.D.: The Prediction of Material Damping of Laminated Composites	372
Morris, R.E.: The Pratt & Whitney PW100 — Evolution of the Design Concept	211
Mortimer, A., R.M. Eaton, M. McAloney, E. Shening and B. Waldock: Beaufort Sea Loran-C Tests	9
Multi-Engined Helicopters, The Power Pair Locus — A Preliminary Design Aid to Select Power Ratings for: A.L. Neuburger	56
Munday, R.W.: Navigation in the Canadian Navy	19
N	
Navigation in the Canadian Navy: R.W. Munday	19
Navigation, Pleasure Boat: J.A. Read	25
Neuburger, A.L.: The Power Pair Locus — A Preliminary Design Aid to Select Power Ratings for Multi-Engined Helicopters ...	56
New Directions for the Canadian Navigation Society: M. Walker	3
New Materials and Construction Methods, Advanced Design Structural Considerations When Introducing: J.E. Fischler ..	346
New Technology for the Next Generation of Commercial Transports — Real or Imaginary?: I.S. Macdonald	222
O	
Odgers, J. and D. Kretschmer: Some Fuel Effects on Carbon Formation in Gas Turbine Combustors	327
P	
Philip, M.P., Y.K. Jain, B. Kalakrishnan, J.A. Kamalakar, K. Kanakaraju and T.K. Alex: Attitude Sensing of APPLE	108
Piggott, M.R.: Designing Composites for Maximum Toughness	148
Pleasure Boat Navigation: J.A. Read	25
Polhemus, W.L.: Loran-C RNAV: The Best Near-Term Solution to Air Operations in Northeastern North America.	234
Power Pair Locus — A Preliminary Design Aid to Select Power Ratings for Multi-Engined Helicopters, The: A.L. Neuburger	56
Pratt & Whitney PW100, The — Evolution of the Design Concept: R.E. Morris	211
Prediction of Material Damping of Laminated Composites, The: W.D. Morison	372
President's Message, The: Ian A. Gray	95

R	
Read, J.A.: Pleasure Boat Navigation	25
Repair of Aircraft Structural Parts, The Use of Composite Patches for: R.F. Scott and P. Huculak	122
Rosenthal, G.: The Application of a Sub-Scale Flight Demonstrator as a Cost-Effective Approach to Aircraft Development	359
Rudnitski, D.M., W.L. MacMillan and W. Grabe: Compressor Stall Inducing Installation Effects of an Engine Control Parameter for the CF-5 Aircraft	28

S	
Scott, R.F. and P. Huculak: The Use of Composite Patches for Repair of Aircraft Structural Parts	122
Shening, E., R.M. Eaton, M. McAloney, A. Mortimer and B. Waldock: Beaufort Sea Loran-C Tests	9
Simulation Analysis for the Design and Evaluation of an Integrated Marine Navigation System: D.F. Liang and J.C. McMillan	166
Sinclair, M., S. Kereliuk and S. Grossmith: An Evaluation of IFR Handling Qualities of Helicopters Using the NAE Airborne Simulator	264
Smillie, D.G.: The Impact of Composite Technology on Commercial Transport Aircraft	135
Some Fuel Effects on Carbon Formation in Gas Turbine Combustors: J. Odgers and D. Kretschmer	327

T	
Terwissen, G.A. and L.K. John: Development of a Structural, Bird Impact Resistant, De-Iced Wing Leading Edge for the de Havilland DASH 8 Aircraft Using Fibre-Reinforced Composites	252
Transport Aircraft, The Impact of Composite Technology on Commercial: D.G. Smillie	135

U	
Use of Composite Materials in Aircraft Propellers, The: D.G. Hall and J.H. Young ..	97
Use of Composite Patches for Repair of Aircraft Structural Parts, The: R.F. Scott and P. Huculak	122

W	
Waldock, B., R.M. Eaton, M. McAloney, A. Mortimer and E. Shening: Beaufort Sea Loran-C Tests	9
Walker, M.: New Directions for the Canadian Navigation Society	3
Wave Drag from Airfoil Wake Measurements, Extraction of: G.M. Elfstrom	42

Y	
Young, J.H. and D.G. Hall: The Use of Composite Materials in Aircraft Propellers	97

